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**OBJECTIVES:** To reduce the increase of the expenditure in disease-modifying drugs (DMD) used in the first line treatment of remitting-relapsing multiple sclerosis (RRMS) by forcing a decrease in the price of drugs, as a consequence of the introduction of competition mechanisms. **METHODS:** By the second half of 2009, the first biosimilar drug of beta-interferon (bIFN)-1b Betaferon® (Extavia®), gained access to the Spanish market, and as a consequence of the acquisition public contest set up by our hospital, Extavia® was selected, with 7% discount. At that time, bIFN-1b was used in about 40% of RRMS patients treated in first line. By the end of 2010, the Pharmacy Comitee evaluated the different DMD, taking as starting an Andalussian Agency for Health Technology Assessment report, and stated that bIFN-1a sc (44 mg), bIFN-1b and Glatiramer acetate were therateutic equivalents for the initial treatment of RRMS. An open contest was announced to select the drug to be used as first line treatment. The lowest therapeutic equivalent daily treatment cost was selection criterion. All new patients were commenced on the drug selected. A comitee composed by the Medical Manager and the heads of the Neurology and the Pharmacy departments assesses the requests for treatment in each case. The cost difference between the selected treatment and average cost before the evaluation was multiplied by the total number of new patients to calculate savings generated. **RESULTS:** Overall, cost per patient was reduced by 4.5% when Extavia® was selected as bIFN-1b. When, in a second step, bIFN-1b was designated as first line drug for RRMS, cost per patient decreased by an additional 7%. A total of 150,000 € (one year) was saved as a result of this strategy. **CONCLUSIONS:** Therapeutic equivalence offers a sound means to improve the efficiency beyond that obtained with biosimilar drugs, especially in high cost drugs used in chronic illnesses.

PND67

**THE IMPACT OF MEMANTINE AND CHOLINESTERASE INHIBITORS INITIATION FOR ALZHEIMER'S DISEASE ON THE USE OF ANTIPSYCHOTICS AGENTS: ANALYSIS USING THE RAMQ DATABASE**

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**OBJECTIVES:** Patients with Alzheimer's disease (AD) show a high incidence of behavioral and psychological symptoms of dementia (BPSD), which often lead to the prescription of antipsychotics. The objective of the present study was to assess the impact of the initiation of memantine or cholinesterase inhibitors (ChEIs) on the use of antipsychotics. **METHODS:** Patients covered by the Quebec provincial drug reimbursement program (RAMQ) who had a diagnosis of AD and were initial users of memantine or ChEIs in the period from January 2005 to March 2011 were selected. The proportion of patients who used antipsychotic drugs was estimated using prescription data dating back up to 1 year before and up to 1 year after the first prescription of memantine or ChEIs. For each month in the year before and after initiation of memantine or ChEIs, the proportion of patients who used an antipsychotic was estimated. The difference between the slopes corresponding to the periods pre- and post-memantine or ChEIs were analyzed using an interrupted time series (ITS) design. **RESULTS:** Of the random sample of 21,716 patients, 8.9% (n =1,929) initiated memantine whereas 91.1% (n =19,787) initiated a ChEI. The percentage of antipsychotics users increased by 118.3% before and by 68.3% after initiation of a ChEI, and increased by 68.6% before and by 7.0% after initiation of memantine. According to the ITS analysis, antipsychotics trends pre- and post-ChEI initiation were not statistically different ($P = 0.89$) while a statistical difference was observed when comparing the antipsychotics trends pre- and post- memantine initiation ($P< 0.001$). **CONCLUSIONS:** The initiation of memantine, unlike ChEIs, has a notable stabilization effect on the prescription of antipsychotics in AD patients. Given the concerns associated with the use of antipsychotics in AD patients, initiation of memantine could be considered as a relevant alternative to alleviate BPSD.

PND68

**COMPARISON OF HOSPITALIZATIONS AMONG PARKINSON'S PATIENTS WHO INITIATED THERAPY WITH A DOPAMINE AGONIST OR RASAGILINE: EVIDENCE FROM THE MEDICARE SUPPLEMENTAL DATABASE**

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**OBJECTIVES:** Examine number of hospitalizations, length of stay and costs among patients diagnosed with Parkinson's Disease initiating therapy with either a dopamine agonist (DA) or Rasagiline. **METHODS:** This study utilized data from the MarketScan Medicare Supplemental Database from 2/1/2006 through 12/31/2011. Patients were prescribed Rasagiline or a DA, with first such date identified as index date, were diagnosed with PD in the 3 years post index date (e.g., the post-period), had continuous insurance coverage from 6 months prior (e.g., the pre-period) through the end of the post-period, and were at least 65 years old. The odds or hospitalization were estimated using logistic regression, while hospital length of stay (LOS) and number of hospitalizations were estimated using negative binomial regressions. The costs associated with hospitalizations were estimated from a two part multivariate model where the first part estimated the probability of being hospitalized and the second part estimated costs among those hospitalized. **RESULTS:** There were 7,230 individuals in the analyses (5,886DA; 1,234 Rasagiline). The mean age was 76 years and most were male (58.40%), resided in the North Central (33.71%) or Southern (30.14%) regions of the US and were insured via comprehensive (48.42%) or preferred provider organization (36.06%) supplemental insurance. After controlling for patient characteristics, general health, disability status, comorbid diagnoses, and index prescription characteristics, Rasagiline, compared to DA, was associated with a significantly lower probability of being hospitalized in the post-period (OR=0.755; 95% CI 0.663 – 0.860), significantly fewer hospitalizations (-0.21; P<0.0001) and shorter LOS (-0.38 days; P<0.0001) compared to individuals who initiated on a DA. Furthermore, total costs associated with hospitalizations were 24% lower among patients who initiated on Rasagiline ($12,327 v $16,525; P<0.0001) compared to initiators on a DA. **CONCLUSIONS:** Among patients with PD, initiation with Rasagiline compared to a DA is associated with significantly improved hospitalization outcomes.

PND69

**DEVELOPMENT AND VALIDATION OF A PATIENT-REPORTED OUTCOMES QUESTIONNAIRE FOR THE ASSESSMENT OF HEREDITARY ANGIOEDEMA IN OBSERVATIONAL STUDIES**

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**OBJECTIVES:** Qualitative interview aimed to develop a PRO questionnaire that allows assessment of HAE acute attacks. **METHODS:** Open-ended qualitative interviews were performed with HAE patients in Argentina (n=10) and the US (n=33); these data were used to develop the first draft questionnaire. Subsequently, more in-depth qualitative interviews were performed with HAE patients in the UK (n=10), Brazil (n=10), Germany (n=11) and France (n=12). Patients who had experienced abdominal, cutaneous or laryngeal attacks of varying severity levels were recruited. Patients initially discussed their experience of HAE attack symptoms, impacts and treatments in an open-ended manner. Cognitive debriefing of the PRO was then performed to assess patient understanding and relevance of questionnaire items. **RESULTS:** Most commonly reported abdominal attack symptoms include pain, vomiting, stomach swelling, diarrhoea and nausea. Cutaneous attacks caused skin swelling, pain and redness. Laryngeal attacks led to difficulty breathing, voice change and difficulty swallowing. Patients also discussed attack triggers, warning signs, impacts and treatment options. Elicited concepts were mapped onto the PRO, which was revised to include all aspects of importance to HAE patients. Cognitive debriefing aided in the revision of the questionnaire. **CONCLUSIONS:** Data from the qualitative interviews were used to develop an expanded conceptual model capturing all aspects of HAE. The PRO was revised to ensure all concepts of importance to HAE are captured. The questionnaire can be considered a valid tool for the long term assessment of the HAE patients.

PND70

**PATIENT CHARACTERISTICS AND TREATMENT STATUS IN PARKINSON'S DISEASE (PD)**

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**OBJECTIVES:** Examine patient characteristics and predictors of treatment in U.S. patients with PD. **METHODS:** Data were obtained from MarketScan between 1/1/2006 and 3/30/2011. Selected patients were diagnosed with PD, with initial diagnosis date identified as index date. Each subject was at least 35 years old and had continuous insurance coverage from 6 months prior through 12 months post index date. Descriptive analysis of patient characteristics compared differences in continuous variables using t-tests and categorical variables using chi-square statistics. Logistic regression examined predictors of treatment. The pre-specified level of statistical significance was 5%. **RESULTS:** There were 9,423 subjects who met study criteria. Most (n = 5,541, 58.8%) were treated with pharmacotherapy. Treated individuals were older than untreated (57.1 vs. 56.0 years, p<0.0001), more likely to be male (p=0.0035), more likely to reside in the south and less likely to reside in the northeast (p<0.0001). In general, the treated cohort tended to be in poorer health and have greater disability. The treated were more likely to have been diagnosed by a neurologist and there were differences in the types of health insurance plans in which they were enrolled. The logistic analysis examining predictors of treatment revealed odds ratios (point estimate; 95% CL) for filling a PD prescription were higher with age (1.03; 1.023 - 1.037), medical ADL (1.349; 1.170 - 1.556) or muscular skeletal (1.467; 1.329-1.618) disability, prior comorbid disease, diagnosis by a neurologist relative to a GP (1.385; 1.228 – 1.561), and being enrolled in either a POS (1.524; 1.264 – 1.837) or PPO (1.151; 1.024 – 1.293) health plan. Factors associated with a lower likelihood of being treated included being female (0.852; 0.780 – 0.930), region of residence, and higher Charlson Comorbidity Score (0.915; 0.877 – 0.955). **CONCLUSIONS:** These analyses highlighted potential age, gender and access disparities in receipt of treatment for PD.

PND71

**PREDICTORS OF TREATMENT CLASS CHOICE IN PARKINSON'S DISEASE**

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**OBJECTIVES:** Examine patient characteristics and predictors of pharmaceutical treatment class choice among US patients diagnosed with Parkinson's Disease (PD). **METHODS:** This retrospective study utilized data from the MarketScan Claims and Encounters database over the period from 1/1/2006 through 12/31/2011. Patients were included in the study if they were diagnosed with PD (with first such date identified as index date), were at least 35 years old, had continuous insurance coverage from 6 months prior through 12 months post index date, and received a post-period prescription a medication for one of the following anti-PD classes: dopamine agonist (DA), MAO-B inhibitor (MAO-B) or levodopa (LD). The study consisted of descriptive analyses comparing the cohorts and logistic regressions ex-